

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织  
国际局



(43) 国际公布日:  
2005年2月3日(03.02.2005)

PCT

(10) 国际公布号:  
WO 2005/011305 A1

(51) 国际分类号<sup>7</sup>: H04Q 7/00  
(21) 国际申请号: PCT/CN2004/000854  
(22) 国际申请日: 2004年7月23日(23.07.2004)  
(25) 申请语言: 中文  
(26) 公布语言: 中文  
(30) 优先权:  
    03149952.X      2003年7月31日(31.07.2003) CN

(71) 申请人(对除美国以外的所有指定国): 华为技术有限公司(HUAWEI TECHNOLOGIES CO., LTD.) [CN/CN]; 中国广东省深圳市龙岗区坂田华为总部办公楼, Guangdong 518129 (CN).

(72) 发明人;及  
(75) 发明人/申请人(仅对美国): 张文林(ZHANG, Wenlin)  
[CN/CN]; 中国广东省深圳市龙岗区坂田华为总部办  
公楼, Guangdong 518129 (CN)。

(74) 代理人: 北京德琦知识产权代理有限公司(DEQI INTELLECTUAL PROPERTY LAW CORPORATION); 中国北京市海淀区花园东路10号高德大厦8层, Beijing 100083 (CN)。

(81) 指定国(除另有指明, 要求每一种可提供的国家保护):  
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW,  
BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM,  
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR,  
HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,  
MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,  
PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW

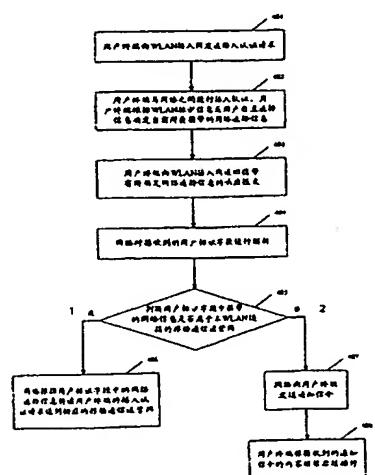
(84) 指定国(除另有指明, 要求每一种可提供的地区保护):  
ARIPO(BW, GH, GM, KE, LS, MW, MZ, NA, SD,  
SL, SZ, TZ, UG, ZM, ZW), 欧亚专利(AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM), 欧洲专利(AT, BE, BG,  
CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU,  
IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR),  
OAPI(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG)

本国际公布：  
— 包括国际检索报告。

所引用双字母代码和其它缩写符号，请参考刊登在每期PCT公报期刊起始的“代码及缩写符号简要说明”。

**(54) Title: A OPTIMIZATION MUTUAL METHOD OF THE USER TERMINAL SELECT ACCESSING MOBILE NETWORK IN WLAN**

(54) 发明名称: 无线局域网中用户终端选择接入移动网的优化交互方法



- 401 USER TERMINAL TRANSMIT REQUEST OF ACCESS AUTHENTICATION TO WLAN ACCESSING NETWORK
- 402 PERFORM ACCESS AUTHENTICATION BETWEEN USER TERMINAL AND NETWORK, USER TERMINAL DETERMINES THE CURRENTLY NETWORK SELECTION INFORMATION WILL BE TO TAKE DEPEND ON WLAN IDENTIFICATION INFORMATION OR SELECTION INFORMATION OF THE USER
- 403 USER TERMINAL RETURN THE CORRESPONDING MESSAGE WITH THE DETERMINED NETWORK SELECTION INFORMATION TO WLAN ACCESSING NETWORK
- 404 NETWORK RESOLVE THE RECEIVED USER IDENTIFICATION SYMBOL DETERMIN WHETHER THE NETWORK SELECTION INFORMATION IS MOBILE COMMUNICATION NETWORK CURRENTLY CONNECTION WITH WLAN
- 405 NETWORK TRANSMIT REQUEST OF ACCESS AUTHENTICATION OF USER TERMINAL TO CORRESPONDING MOBILE COMMUNICATION NETWORK BASED ON NETWORK SELECTION INFORMATION IN THE USER IDENTIFICATION SYMBOL
- 407 NETWORK TRANSMIT NOTIFICATION SIGNAL TO USER TERMINAL
- 408 USER TERMINAL CARRY OUT LATER OPERATION DEPENO ON RECEIVED NOTIFICATION SIGNAL.
  - 1 YES
  - 2 NO

**(57) Abstract:** The present invention disclosed a optimization mutual method of the user terminal select accessing mobile network in WLAN (Wireless Local Area Network), include steps: The VVLAN user terminal connection with WLAN accessing network in manner of wireless, network or WLAN user terminal beginning the process of access authentication, WLAN accessing network transmit a request respect of user name message to user terminal. After the user terminal received the request, determine the currently network selection information will to be take depend on the change of the WLAN accessing network or selection information of the user, and return the determined network selection information to VVLAN accessing network. Network determine whether the network selection information is mobile communication network currently connection with VLAN, if is, transmit the request of access authentication to corresponding mobile communication network, if is not, network transmit notification signal to the user terminal, the user terminal carry out the later operation depend on the notification signal. The present invention provide when user terminal access a WALN connection with a plurality of mobile communication work, can optimization access process of selecting optimum mobile communication network depend on require.



## (57) 摘要

本发明公开了一种无线局域网（WLAN）中用户终端选择接入移动网的优化交互方法，包括： WLAN 用户终端与 WLAN 接入网建立无线连接后，网络或 WLAN 用户终端发起接入认证过程， WLAN 接入网向该用户终端发送请求用户名报文； 用户终端收到后，根据 WLAN 接入网变化情况或用户自主选择信息确定当前所要携带的网络选择信息，并将确定的网络选择信息返回 WLAN 接入网； 网络判断该网络选择信息是否属于当前 WLAN 连接的移动通信运营网，如果是，则将所述接入认证请求发送至相应的移动通信运营网，否则网络向所述用户终端发通知信令，用户终端根据通知信令完成后续操作。本发明使用户终端在从一个连接有多个移动通信运营网的 WLAN 接入时，能根据需要优化选择最优的移动通信运营网接入过程。